

6.3/6.4 Review

Date _____ Period _____

Find each measurement indicated. Round your answers to the nearest tenth.

1) $m\angle B = 123^\circ$, $a = 17$ in, $b = 38$ in
Find $m\angle A$

2) $m\angle B = 19^\circ$, $a = 35$ mi, $b = 31$ mi
Find $m\angle C$

3) $m\angle A = 33^\circ$, $c = 28$ km, $a = 15$ km
Find $m\angle B$

4) $m\angle A = 154^\circ$, $c = 31$ km, $a = 44$ km
Find $m\angle C$

5) $c = 20$ cm, $m\angle A = 123^\circ$, $b = 14$ cm
Find a

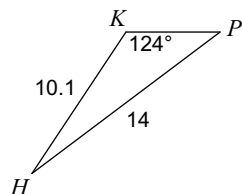
6) $a = 18$ in, $m\angle B = 144^\circ$, $c = 25$ in
Find b

7) $c = 16$ ft, $a = 14$ ft, $m\angle B = 130^\circ$
Find $m\angle C$

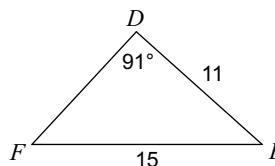
8) $a = 11$ yd, $c = 10$ yd, $m\angle B = 108^\circ$
Find $m\angle C$

Find the area of each triangle to the nearest tenth.

9)

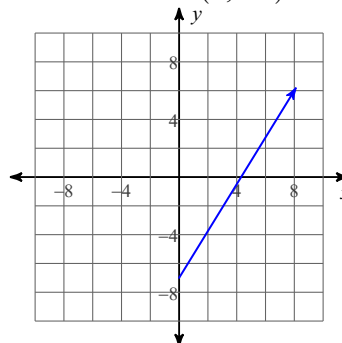


10)

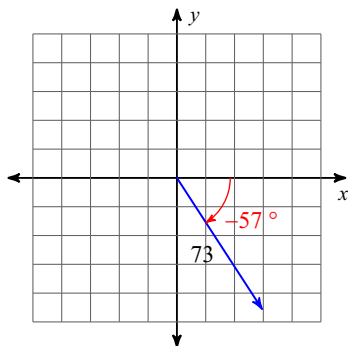
**Find the following information for each vector, if not provided in the question: Graph, component form, linear combination, magnitude and direction angle.**

11) $4\mathbf{i} + 38\mathbf{j}$

12) \overrightarrow{RS} where $R = (0, -7)$ $S = (8, 6)$

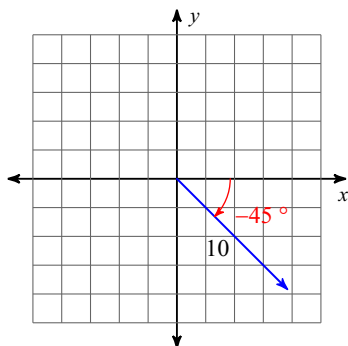


13)

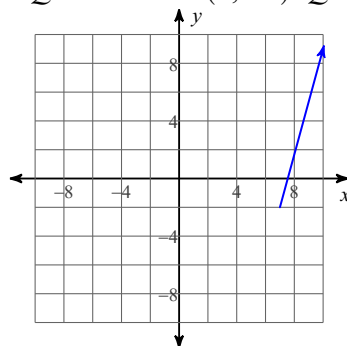


14) $39\mathbf{i} - 11\mathbf{j}$

15)



16) \overrightarrow{PQ} where $P = (7, -2)$ $Q = (10, 9)$

**Find the component form of the resultant vector.**

17) $|\mathbf{u}| = 17, 183^\circ$

Find: $-6\mathbf{u}$

18) $|\mathbf{f}| = 4, 190^\circ$ $|\mathbf{v}| = 16, 298^\circ$

Find: $-8\mathbf{f} - \mathbf{v}$

19) Given: $T = (-6, -9)$ $X = (-10, -5)$

Unit vector in the direction of \overrightarrow{TX} **Express the resultant vector as a linear combination of unit vectors \mathbf{i} and \mathbf{j} .**

20) $|\mathbf{f}| = 6, 79^\circ$

Find: $-10\mathbf{f}$

21) Given: $P = (6, 4)$ $Q = (3, 5)$
 $R = (-6, -1)$ $S = (-1, 6)$
Find: $5\overrightarrow{PQ} + 6\overrightarrow{RS}$

22) Given: $P = (8, -2)$ $Q = (-9, 0)$

Find: $5\overrightarrow{PQ}$